

LEPIDOPTERA IN THE SCOTTISH HIGHLANDS IN AUGUST 1995

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PROMPTED BY Dick Chatelain and Bernard Skinner's account of their visit to the Spey valley area entitled "Aviemore in August 1964" (Chatelain & Skinner, 1964), and encouraged by enthusiastic reports via Julian Clarke for 1993, it was decided that a visit to this area during mid-August might perhaps do our respective collections no harm at all. General accounts of trips to areas of entomological interest, which in the past have been a feature of *The Record* and a source of interest, information and inspiration, seem to have declined over recent years. It is hoped that this short article will encourage other entomologists to maintain old traditions in this ever-changing world.

Proceedings commenced on Friday 11 August with arrangements to meet at Arnside Knott, Cumbria, in mid-afternoon, JP and RC travelling via Ferndown, Dorset and DY motoring from Reading via Dungeness to collect SC. The whole of the UK had been in the grip of a prolonged heatwave for some time and fortunately the favourable weather conditions were to continue un-broken throughout our week's stay north of the border.

On arrival at Arnside a brief look over the Knott revealed virtually nothing flying due to the extremely hot and dry conditions, *Erebia aethiops** being very worn and almost over, the few remaining specimens being actively pursued by butterfly enthusiasts festooned with camera equipment. The same paucity of insects was also true at nearby Meathop Moss, Witherslack, with *Pieris napi*, *Scotopteryx chenopodiata* and *Autographa gamma* being the only species noted. After this somewhat disappointing start where better to revive our spirits than to retreat to that historically famous entomological watering hole "The Derby Arms" at Witherslack where, having found local overnight accommodation, and over an excellent alcohol-supplemented meal, the forthcoming campaign was planned with meticulous precision.

The base for our operations was to be a friend's rented bungalow situated at Drumguish, a small hamlet about three miles from Kinguisse on the B970 close to Loch Insh, and this was reached at about 2pm on the 12 August. The surrounding terrain is typical of the locality with pine and birch growing amidst areas of heather and bilberry. This location proved to be a wise choice as the garden traps produced many of the species that we hoped to see during our stay including *Aporophyla lueneburgensis*, *Paradiarsia sobrina*, *Lithomoia solidaginis*, *Eugnorisma depuncta* and *Enargia paleacea*. Having democratically concluded negotiations for sleeping and setting space, and allocated positions for the garden traps, no time was lost in exploring the

* Authors of scientific names are listed in Appendix 1.

area. JP and RC repaired to Carrbridge where lights were run in an area of pine with extensive bilberry understorey, off the road leading to the railway station. Thirty-five species were recorded including a few *P. sobrina*, *E. depuncta* and *E. paleacea*. Meanwhile DY and SC simultaneously trapped at Lynwilg on a section of the old road running parallel to the A9 from Lynwilg towards Kinakyle. Whilst this site looked unpromising, being dominated by birch and bracken, a total of forty-six species were recorded notably *Gnophos obfuscata*, *E. depuncta* (20), *P. sobrina* (2), *Diarsia dahlia* (12), *E. paleacea* (8) and *Stilbia anomala* (3), numbers which were to be significantly increased on a return trip later in the week.

Our plans included two fairly long distance trips and a decision was made to do them early in the week whilst weather conditions remained ideal. The 13 August saw the team at Loch Arkaig, the main object being to locate *Perizoma taeniata* and *Colostygia olivata*, traps being run alongside the B8005 about one and a half to two miles west of Clunes and before reaching the Gleann Cia-aig waterfall in an area dominated by damp woodland, the stone walls and branches positively dripping with mosses and lichens. Disaster overtook SC when his generator gave up the ghost for the remainder of the week and thus a somewhat sombre mood prevailed. However in cloudy and fairly mild conditions thirty-five species were recorded including *C. olivata* (40) and *P. taeniata* (7) all of which were in a generally worn condition, and a fresh example of *Celaena leucostigma scotica*.

On the 14 August, taking advantage of the continuing hot weather, we motored northwards to the sand dunes at Findhorn near Forres, Morayshire. Readers of the original article mentioned earlier will appreciate the full range of weather conditions which can be experienced on this exposed site. We were fortunate to find it clear, mild and dry although a persistent breeze meant that the traps had to be sited in the shelter of the dunes and low vegetation. Concrete bollards now prevent vehicular access along the dune system and consequently equipment had to be carried some distance into the dunes. Forty-one species were recorded, some of the more notable being *Euxoa cursoria* which was common (30+), *S. anomala* (common) and a single *Actebia praecox* in good condition. Of particular interest was *Noctua comes* which was common and included a predominance of the reddish-brown and black forms, well known from this locality. A number of females were retained for breeding and numerous batches of fertile ova obtained after several days of careful care and nurture. Bred examples, showing the full range of colour variation, were obtained during the autumn and winter of 1995.

The 15 August saw us back at Lynwilg where a further eleven species were added to the list recorded on the 12 August. *E. depuncta*, *S. anomala* (both sexes) and *E. paleacea* were quite common and several specimens of *P. sobrina* were recorded, almost all chipped, torn and worn. By this date the

first specimens of *Antitype chi* and *A. lueneburgensis* were being recorded in the garden traps at Drumguish so we decided to make the trip southwards to the high moorland area east of Trinafour, Perthshire on the 16 August where Julian Clarke had recorded impressive numbers of the latter species in 1993. Weather conditions were good for this high and exposed site, where wind and rain are no doubt the norm, with a light breeze, dry but cool and clear. Results were however generally disappointing: *Lithomia solidaginis* being fairly common, *A. lueneburgensis* in small numbers and single examples of *Trichiura crataegi*, *Entephria flavicinctata* and *Apamea zeta assimilis*. In addition three *Epirrita fligrammaria* came to light but a thorough search of the heather, particularly by SC, surprisingly failed to produce any further examples of this sought-after species. Sweeping the heather produced large numbers of larvae of assorted species.

After our efforts over the previous few days it was decided to stay nearer base camp on the 17 August. A daytime visit to the Loch Morlich/Coylumbridge area produced numerous larvae of *Thera juniperata scotica* beaten from the wild juniper bushes, however they were exceedingly small. Pupa were duly obtained and a few moths emerged later in the year but many others seem to be delaying emergence until 1996. Searching stone walls near Insh failed to locate examples of *A. chi*, perhaps the hot weather prompting them to hide away in cooler places rather than to rest in more exposed positions. One larva of *Rheumaptera hastata nigrescens* was found by RC spun up in the terminal shoot of bog myrtle. *E. aethiops* was common both in fields and along roadside verges. The results of the prolonged drought were evident with rivers at a low ebb, mountain streams virtually dry and many trees showing signs of stress. This was particularly so with the aspens at Feshiebridge which looked to be in a poor state. Night operations centred on the extensive areas of birch, heather and bilberry on both sides of the B970 running between Drumguish and Kinguisse. Reasonable weather conditions prevailed but there were no surprises amongst the forty-four species recorded. *P. sobrina* was again in evidence as were *A. lueneburgensis*, *E. depuncta*, *A. chi* and numerous *L. solidaginis*. A second example of *C. leucostigma scotica* was noted amongst prodigious numbers of *Celaena haworthii*.

By Friday 18 August the stamina of virtually all concerned was beginning to fall having trapped every night since our stay, and certainly JP and RC felt that a good night's sleep would not go amiss, although the other two insomniacs were to have other ideas. Daytime activity encompassed a trip to the quarry near Dalwhinnie to search for larvae of *Eupithecia distinctaria constrictata*, and to Lynchat for *Eupithecia valerianata*. Neither search was successful, the larvae having pupated somewhat earlier than might have been expected, no doubt another effect of the hot summer for which 1995 will be long remembered. Searching stone walls once again failed to locate *A. chi*

but more success was obtained during the day, and early the following morning, by searching the white-washed, and well-illuminated, walls and toilet block at the Highland Folk Museum near Newtonmore. How would British entomology have evolved without white-washed walls and toilet blocks one wonders.

Total exhaustion now having set in, and it being our last evening before returning south, it was agreed that a modest evening celebration dinner might be in order. The chosen venue was "The Topsy Laird" in the High Street, Kingussie, which despite its somewhat unimposing exterior is to be thoroughly recommended. On entry one pair of species we had not expected to encounter was Mr and Mrs Peter Baker on holiday in the area, a nice surprise. In the evening SC, who appeared to have some energy left, trapped near Lynchat in an area of lush vegetation near a small loch, hoping to record further specimens of *C. leucostigma scotica*. Despite reasonable weather conditions this species was not recorded and no new species were added to the total tally for our trip. As we were continuing to run the garden traps up to the very last moment DY very sportingly volunteered to check the traps at regular intervals throughout the night for by now the local bird population, supplemented by several frogs, had detected an easy source of food and it was obvious that a considerable number of moths were being consumed well before the traps were checked in the mornings.

Very few species of microlepidoptera were recorded during our stay and the Pyralidae were represented only by such familiar species as *Agriphila straminella*, *A. tristella*, *Eudonia truncicolella*, *Pyrausta purpuralis*, *Udea lutealis*, *Aphomia sociella*, *Pyla fusca* and *Dioryctria abietella*. A total of 106 species of macrolepidoptera were recorded during our week in Scotland at the various sites visited, of which some 85 species were recorded at Drumguish where six traps run for seven consecutive nights gave saturation coverage, not to mention additional illumination for nearby barbecues. We had seen all the species that we had hoped and much else besides. *Chloroclysta citrata citrata* was everywhere abundant and in a variety of beautiful forms, as noted by Dick Chatelain and Bernard Skinner. Almost as abundant, widespread and variable were the moorland forms of *Eulithis testata* and *Hydriomena furcata*. Other species of interest included *Xanthorhoe fluctuata* f. *thules* with examples at Drumguish and Newtonmore; *Plemyria rubiginata plumbata* and *Aplocera plagiata scotica* both from Drumguish; very dark forms of *Xestia xanthographa*; *Autographa bractea* and *Syngrapha interrogationis*. A complete list of the species recorded has been sent to Keith Bland in the hope that the records, even from well-worked areas, will be of some use to Scottish entomologists.

All good things must come to an end and therefore reluctantly on 18 August we travelled south for home and, would you believe it, on the way down the A9 it actually rained!

References

- Chatelain, R. & Skinner, B., 1964. Aviemore in August 1964. *Entomologist's Record and Journal of Variation* **76**: 234-235.
- Bradley, J.D. & Fletcher, D.S., 1979. *A Recorder's Log Book or Label List of British Butterflies and Moths*. Curwen Books, London.

Appendix 1: Species recorded at the principal sites visited, August 1995.

Key:

- Site A: Drumguish, Nr. Kinguisse, East Inverness-shire
 Site B: Lynwilg, Nr. Aviemore, East Inverness-shire
 Site C: Carrbridge, East Inverness-shire
 Site D: Nr. Loch Arkaig, West Inverness-shire
 Site E: Findhorn, Morayshire
 Site F: Trinafour, Perthshire
 Site G: Drumguish Heath, Nr. Kinguisse, East Inverness-shire
 Site H: Lynchat, Nr. Kinguisse, East Inverness-shire

Log Numbers are taken from Bradley & Fletcher (1979).

Log No:	Species	Sites	A	B	C	D	E	F	G	H
Pyralidae										
1304	<i>Agriphila straminella</i> D.&S.		*	*						*
1305	<i>A. tristella</i> D.&S.		*			*	*	*		*
1340	<i>Eudonia truncicolella</i> Stt.					*	*			
1388	<i>Udea lutealis</i> Hb.		*							
1428	<i>Aphomia sociella</i> L.			*						
1451	<i>Pyla fusca</i> Haw.			*						
1454	<i>Dioryctria abietella</i> D.&S.		*							
Lasiocampidae										
1632	<i>Trichiura crataegi</i> L.							*		
Geometridae										
1713	<i>Idaea aversata</i> L.			*						
1722	<i>Xanthorhoe designata</i> Hufn.		*	*						
1723	<i>X. munitata munitata</i> Hb.		*							
1727	<i>X. montanata montanata</i> D.&S.		*							
1728	<i>X. fluctuata</i> L.		*	*		*	*			
	<i>X. thules</i> Prout		*							
1732	<i>Scotopteryx chenopodiata</i> L.						*			
1734	<i>S. luridata plumbaria</i> Fabr.		*					*		
1738	<i>Epirrhoe alternata alternata</i> Mull.		*	*		*				
1742	<i>Campptogramma bilineata bilineata</i> L.		*	*		*	*		*	*
1743	<i>Entephria flavicincta ruficinctata</i> Guen.							*		
1744	<i>E. caesiata</i> D.&S.		*	*	*	*		*		
1752	<i>Cosmorhoe ocellata</i> L.		*	*		*	*			
1754	<i>Eulithis prunata</i> L.		*							

Log No:	Species	Sites	A	B	C	D	E	F	G	H
1755	<i>E. testata</i> L.		*	*	*		*	*	*	*
1756	<i>E. populata</i> L.		*	*	*	*	*	*	*	
1758	<i>E. pyraliata</i> D.&S.					*				
1760	<i>Chloroclysta siterata</i> Hufn.								*	
1762	<i>C. citrata citrata</i> L.		*	*	*	*		*	*	*
1765	<i>Cidaria fulvata</i> Forst.		*							
1766	<i>Plemyria rubiginata plumbata</i> Curt.		*							
1767	<i>Thera firmata</i> Hb.		*	*	*					
1768	<i>T. obeliscata</i> Hb.		*	*		*				
1770	<i>T. cognata</i> Thunb.		*	*	*					
1774	<i>Colostyga olivata</i> D.&S.			*		*				
1776	<i>C. pectinataria</i> Knoch.		*	*		*			*	
1777	<i>Hydriomena furcata</i> Thunb.		*	*	*	*		*	*	*
1798	<i>Epirrita filigrammaria</i> H.-S.							*		
1801	<i>Perizoma taeniata</i> Steph.					*				
1809	<i>P. didymata didymata</i> L.		*	*	*	*	*	*	*	*
1811	<i>Eupithecia tenuiata</i> Hb.						*			
1854	<i>E. pusillata pusillata</i> D.&S.		*	*	*				*	*
1866	<i>Carsia sororiata anglica</i> Prout.		*						*	*
1867	<i>Aplocera plagiata scotica</i> Rich.		*	*						
1873	<i>Venusia cambrica</i> Curt.					*				
1906	<i>Opisthograptis luteolata</i> L.		*	*						
1907	<i>Epione repandaria</i> Hufn.		*							*
1913	<i>Ennomos alniaria</i> L.					*	*			
1921	<i>Crocallis elinguaris</i> L.		*	*	*	*	*			
1937	<i>Peribatodes rhomboidaria</i> D.&S.				*					
1941	<i>Alcis repandata repandata</i> L.		*			*				
1962	<i>Hylaea fasciaria</i> L.		*							
1963	<i>Gnophos obfuscata</i> D.&S.		*	*						

Sphingidae1981 *Laothoe populi* L.

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Notodontidae2011 *Pterostoma palpina* Cl.

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Noctuidae2081 *Euxoa tritici* L.

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2082 *E. nigricans* L.

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2083 *E. cursoria* Hufn.

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2085 *Agrotis vestigialis* Hufn.

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2099 *Actebia praecox* L.

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2102 *Ochropleura plecta* L.

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2103 *Eugnorisma depuncta* L.

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2107 *Noctua pronuba* L.

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2109 *N. comes* Hb.

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2111 *N. janthe* Borkh.

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2114 *Graphiphora augur* Fabr.

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Log No:	Species	Sites	A	B	C	D	E	F	G	H
2116	<i>Paradiarsia sobrina</i> Dup.		*	*	*				*	
2117	<i>P. glareosa glareosa</i> Esp.		*	*	*		*	*	*	*
2118	<i>Lycophotia porphyrea</i> D.&S.		*		*					
2120	<i>Diarsia mendica mendica</i> Fabr.		*	*	*			*		
2121	<i>D. dahlia</i> Hb.		*	*	*	*	*		*	*
2130	<i>Xestia baja</i> D.&S.		*	*	*	*			*	*
2132	<i>X. castanea</i> Esp.		*	*	*			*	*	
2134	<i>X. xanthographa</i> D.&S.		*	*	*	*	*		*	*
2135	<i>X. agathina agathina</i> Dup.		*	*			*	*	*	*
2160	<i>Lacanobia oleracea</i> L.		*						*	
2164	<i>Hecatera bicolorata</i> Hufn.						*			
2176	<i>Cerapteryx graminis</i> L.		*	*	*	*	*		*	*
2192	<i>Mythimna conigera</i> D.&S.			*			*			
2193	<i>M. ferrago</i> Fabr.			*	*					
2198	<i>M. impura scotica</i> Cock.		*				*			
2199	<i>M. pallens</i> L.						*			
2225	<i>Brachylochia viminalis</i> Fabr.		*	*			*	*	*	
2231a	<i>Aporophyla lueneburgensis</i> Freyer		*					*	*	
2232	<i>A. nigra</i> Haw.		*							*
2233	<i>Lithomoia solidaginis</i> Hb.		*		*			*	*	
2254	<i>Antitype chi</i> L.		*	*					*	
2268	<i>Parastichtis suspecta</i> Hb.		*	*	*			*	*	*
2273	<i>Xanthia togata</i> Esp.		*							*
2274	<i>X. icteritia</i> Hufn.		*	*					*	*
2299	<i>Amphipyra tragopoginis</i> Cl.		*			*		*		
2303	<i>Thalpophila matura</i> Hufn.						*			
2313	<i>Enargia paleacea</i> Esp.		*	*	*					
2318	<i>Cosmia trapezina</i> L.		*	*						
2321	<i>Apamea monoglypha</i> Hufn.		*	*	*	*	*	*	*	*
2324	<i>A. zeta assimilis</i> Doubl.							*		
2329	<i>A. furva britannica</i> Cock.		*	*						
2342	<i>Mesoligia literosa</i> Haw.		*	*			*			
2343	<i>Mesapamea secalis</i> L.		*	*			*			
2353	<i>Luperina testacea</i> D.&S.		*				*			
2357	<i>Amphipoea lucens</i> Freyer		*	*	*				*	*
2359	<i>A. crinanensis</i> Burr.		*		*		*		*	
2361	<i>Hydraecia micacea</i> Esp.		*	*		*	*		*	*
2367	<i>Celaena haworthii</i> Curt.		*	*			*	*	*	*
2368	<i>C. leucostigma scotica</i> Cock.					*			*	
2394	<i>Stilbia anomala</i> Haw.		*	*	*	*	*		*	
2434	<i>Diachrysia chrysitis</i> L.		*		*					
2439	<i>Plusia festucae</i> L.		*							
2442	<i>Autographa pulchrina</i> Haw.		*	*		*		*		
2443	<i>A. jota</i> L.		*							
2444	<i>A. bractea</i> D.&S.		*	*						
2447	<i>Syngrapha interrogationis</i> L.			*	*				*	*
2469	<i>Scoliopteryx libatrix</i> L.		*			*				
2477	<i>Hypena proboscidalis</i> L.		*		*					